

Amendments to Claims

Claims 1-31 (cancelled)

32. (Original) A method for driving an individual member of a multi-element voltage-switchable sensor array

the sensor array comprising microswitch array having a plurality of individual elements of the array connected in series with individual members of a plurality of sensor elements and a bias voltage source,

the microswitch array comprising a plurality of electric microswitches each member of the plurality of microswitches being in first electrode/semiconductor/second electrode layer form with the semiconductor layer being a unit body shared by the members of the array, the plurality of microswitches defined by a row of first electrodes and a column of second electrodes configured in an x-y-addressable array, and the x-y addressable position of each individual microswitch being uniquely defined by a particular first electrode defining the x coordinate and a particular second electrode defining the y coordinate and

said sensor elements producing an electrical signal in response to a stimulus being sensed,

the method comprising

applying a positive bias voltage greater than the microswitch's turn on voltage across the particular first electrode and particular second electrode defining the individual member, leaving the remainder of the first electrodes and the remainder of the second electrodes floating and

reading the electrical signal produced by the particular sensor element.

33. (Original) The method of Claim 32 wherein multiple members of the array are driven serially.

34. (Original) A method for driving an individual member of a multi-element voltage-switchable sensor array

the sensor array comprising microswitch array having a plurality of individual elements of the array connected in series with individual members of a plurality of sensor elements and a bias voltage source, said bias voltage source capable of providing a "high" bias voltage state, a bias voltage state and a "low" bias voltage state,

the microswitch array comprising a plurality of electric microswitches each member of the plurality of microswitches being in first electrode/semiconductor/second electrode layer form with the semiconductor layer

being a unit body shared by the members of the array, the plurality of microswitches defined by a row of first electrodes and a column of second electrodes configured in an x-y-addressable array. and the x-y addressable position of each individual microswitch being uniquely defined by a particular first electrode defining the x coordinate and a particular second electrode defining the y coordinate, and

said sensor elements producing an electrical signal in response to a stimulus being sensed,

the method comprising applying the positive bias to the particular first electrode and the negative bias voltage to the particular second electrode defining the individual member thereby exceeding said member's turn on voltage, and applying the negative bias to the remainder of the first electrodes or applying the positive bias to the remainder of the second electrodes thereby leaving the remainder of the plurality of individual elements in an off condition and

reading the electrical signal produced by the particular sensor element.

35. (Original) The method of Claim 34 wherein multiple members of the array are driven serially.

36. (Original) A method for driving a series of individual member of a multi-element voltage-switchable sensor array

the sensor array comprising microswitch array having a plurality of individual elements of the array connected in series with individual members of a plurality of sensor elements and a bias voltage source, said bias voltage source capable of providing a first bias voltage and a second bias voltage the difference between the two bias voltages exceeding the turn on voltage for the elements of the microswitch array,

the microswitch array comprising a plurality of electric microswitches each member of the plurality of microswitches being in first electrode/semiconductor/second electrode layer form with the semiconductor layer being a unit body shared by the members of the array, the plurality of microswitches defined by a row of first electrodes and a column of second electrodes configured in an x-y-addressable array, and the x-y addressable position of each individual microswitch being uniquely defined by a particular first electrode defining the x coordinate and a particular second electrode defining the y coordinate and

said sensor elements producing an electrical signal in response to a stimulus being sensed,

the method comprising applying the first bias voltage all the first electrodes and applying the second bias voltage bias to a particular second electrode defining a particular

column of individual elements thereby turning on the particular column of elements and leaving the remainder of the plurality of individual elements in an off condition and reading the electrical signal produced by the particular column of sensor elements.

37. (Original) The method of Claim 33 wherein the reading of the electrical signal produced by the particular column of sensor elements is carried out with a digital shift register or a with a digital decoder to produce a series of electrical signals corresponding to the electrical signals generated by the series of sensor elements in the particular column.

Claims 38-41 (cancelled)